March 11, 2003

Mr. Kyle Baugh
D.E. Baugh Company, Inc.
1661 West 16th Street
Indianapolis, Indiana 46202-2060

Dear Mr. Baugh:

Re: Exempt Construction and Operation Status,
097-16868-00345

The application from D.E. Baugh Company, Inc., received on December 7, 1998, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following coating machines, printers, and presses, to be located at 1661 West 16th Street, Indianapolis, Indiana 46202, are classified as exempt from air pollution permit requirements:

(a) One (1) Steinemann UV coating machine, identified as emission unit 1, with a maximum operating capacity of 1037 square feet per minute.

(b) Two (2) Sakurai coating machines, identified as emission units 2 and 3, with a maximum operating capacity of 323 square feet per minute.

(c) Three (3) lithographic printers, identified as emission units 4, 5, and 6, with a maximum operating capacity of 108 square feet per minute.

(d) Three (3) engraving presses, identified as emission units 7, 8 and 9, with a maximum operating capacities of 5, 10, and 2 square feet per minute.

The following conditions shall be applicable:

(a) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

(1) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuos opacity monitor in a six (6) hour period.

(b) Pursuant to 326 IAC 8-2-5 (Paper Coating Operations), no owner or operator of a coating line may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of thirty-five hundredths (0.35) kilograms per liter of coating (two and nine-tenths (2.9) pounds per gallon) excluding water, delivered to the coating applicator from a paper, plastic, metal foil, or pressure sensitive tape/labels coating line.

This exemption is the first air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the OES and IDEM, Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source. If you have any questions, please feel free to contact Angelique Oliger at 327-2846 or aoliger@indygov.org.

Sincerely,

Original Signed by John B. Chavez
John B. Chavez, Administrator

aco

cc: File
Air Compliance, Matt Mosier
IDEM, Mindy Hahn
Permits, Angelique Oliger

Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: D.E. Baugh Company, Inc.
Source Location: 1661 West 16th Street, Indianapolis, Indiana 46202-2060
County: Marion
SIC Code: 2759
Operation Permit No.: 097-16868-00345
Permit Reviewer: Angelique Oliger

The Office of Environmental Services (OES) has reviewed an application from D.E. Baugh Company, Inc. relating to the construction and operation of the following emission units:

(a) One (1) Steinemann UV coating machine, identified as emission unit 1, with a maximum operating capacity of 1037 square feet per minute.

(b) Two (2) Sakurai coating machines, identified as emission units 2 and 3, with a maximum operating capacity of 323 square feet per minute.

(c) Three (3) lithographic printers, identified as emission units 4, 5, and 6, with a maximum operating capacity of 108 square feet per minute.

(d) Three (3) engraving presses, identified as emission units 7, 8 and 9, with a maximum operating capacities of 5, 10, and 2 square feet per minute.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Length and width (feet)	Flow Rate (acfm)	Temperature (^{0}F)
1	1	16	1.5	–	750	150
2	2	16	1	–	750	150
3	3	16	1	–	750	150
4	4 & 5	16	–	1 x 1.3	750	70
5	6	16	1	–	750	70

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Administrator that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 28, 1998.

Emission Calculations

See Appendix A (two pages) of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	negligible
PM-10	negligible
SO_2	negligible
VOC	9.65
CO	negligible
NO_x	negligible
HAPs	5.13

HAP's	Potential To Emit (tons/year)
methanol	0.51
toluene	3.00
xylene	0.66
ethylbenzene	0.40
methylene chloride	0.55
TOTAL	5.13

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO_2	maintenance attainment
NO_2	attainment
Ozone	maintenance attainment
CO	attainment
Lead	unclassifiable

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Marion County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	negligible
PM10	negligible
SO_2	negligible
VOC	9.65
CO	negligible
NO_x	negligible
Single HAP	3.00
Combination HAPs	5.13

(a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,

(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. Because this source does not use rotogravure printing, 40 CFR Part 60 Subpart QQ does not apply to the facility.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this source. Because this source is not a major source of hazardous air pollutants (HAPs), as defined in 40 CFR Part 63.2, 40 CFR Part 63 Subpart KK (National Emissions Standards for the Printing and Publishing Industry) and 40 CFR Part 63 Subpart JJJJ (National Emissions Standard for Paper and Other Web Surface Coating Operations) do not apply to the facility.

State Rule Applicability - Entire Source

326 IAC 1-6 (Preventive Maintenance Plan)

This source is not subject to 326 IAC 1-6, because it is not required to obtain a permit under 326 IAC 2.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source is not subject to 326 IAC 2-4.1, because it is not a major source of hazardous air pollutants, as defined in 40 CFR 63.

326 IAC 2-6 (Emission Reporting)

This source is located in Marion County and its potential to emit any regulated pollutant is less than ten (10*)* tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 7-1 (Sulfur Dioxide Emission Limitations)

This rule does not apply to this source because the potential to emit of each individual unit is less than 25 tons per year or 10 pounds per hour of Sulfur Dioxide.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

This rule does not apply to this source because the potential to emit of VOC is less than twenty-five (25) tons per year of VOC.

326 IAC 8-2-5 (Paper Coating Operations)

This source is subject to 326 IAC 8-2-5 (Paper Coating Operations) because it involves saturation processes of paper. Pursuant to this rule, no owner or operator of a coating line may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in

excess of thirty-five hundredths (0.35) kilograms per liter of coating (two and nine-tenths (2.9) pounds per gallon) excluding water, delivered to the coating applicator from a paper, plastic, metal foil, or pressure sensitive tape/labels coating line.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

This rule does not apply to this source because this source does not have a degreasing machine, only wipe cleaning.

326 IAC 8-5-5 (Graphic Arts Operations)

This source has the potential to emit less than twenty-five (25) tons per year of VOCs, and does not conduct flexographic or rotogravure printing. Therefore, 8-5-5 does not apply.

Conclusion

The construction and operation of these coating machines, printers, and presses shall be exempt from air pollution control permit requirements.

Appendix A: Emissions Calculations

VOC From Printing Press Operations

Company Name: D.E. Baugh
Address City IN Zip: 1661 West 16th Street, Indianapolis, Indiana 4620222-2060
Reviewer: Angelique Oliger
Date: 03/11/03

THROUGHPUT

Press I.D.	MAXIMUM LINE SPE MIN	CONVERT FEET TO INCHES	MAXIMUM PRINT WIDTH INCHES	60 MIN HOUR	8760 HR YEAR	1/1000000	Throughput MMin^2/YEAR (1)
UV Coater 1	311	12	40	60	8760	1000000	78462
UV Coaters 2 & 3	97	12	40	60	8760	1000000	24472
Lithographic 4, 5, and 6	76	12	17	60	8760	1000000	8149
Engraver 7	19	12	3	60	8760	1000000	360
Engraver 8	25	12	5	60	8760	1000000	788
Engraver 9	11	12	2.5	60	8760	1000000	173

(1) Throughput = Maxium line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year

PTE for VOCs

Compound Name (Compound with highest VOC content)	Maxium Coverage lbs/MMin^2	Weight % Volatiles*	Flash Off %	Through Put MMin^2/ Year	Tons 2000 lbs	Tons Year (2)	Number of presses
Pierce stevens UV Coating (used in 1)	2.5	1.00%	100.00%	78462	2000	0.98	1
Pierce stevens UV Coating (used in 2, 3)	2.5	1.00%	100.00%	24472	2000	0.31	2
Braden Sutphin Sheetfed Inks (used in 4, 5, 6)	2.5	19.80%	100.00%	8149	2000	2.02	3
Faust Powders (used in 4,5,6)	5	0.50%	100.00%	8149	2000	0.10	3
Cronite Clean Navy BlueInk (used in 7)	2.5	5.80%	100.00%	360	2000	0.03	1
Cronite Clean Navy BlueInk (used in 8)	2.5	6.00%	100.00%	788	2000	0.06	1
Cronite Clean Navy BlueInk (used in 9)	2.5	6.00%	100.00%	173	2000	0.01	1

VOC (tons/yr) All Presses	**8.05**

(2) VOC = Maximum Coverage pounds per MMin^2 * Weight % volatiles (weight % of water & organics - weight % of water = weights % organics) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year

VOC Emissions From Degreasing Operations

Company Name: D.E. Baugh
Address City IN Zip: 1661 West 16th Street, Indianapolis, Indiana 4620222-2060
Reviewer: Angelique Oliger
Date: 02/27/03

Compound	Maximum Usage Gal/Day	Density Lbs/Gal	%VOC by weight	Lbs/Day	Tons/Yr	Number of Presses
Rycolite Cleaner (used in 1)	0.12	7.1	6.70%	0.06	0.01	1
Rycolite Cleaner (used in 2,3)	1.42	7.1	6.70%	0.68	0.12	2
COL Blanket Wash (used in 4,5,6)	0.45	7.44	70.00%	2.34	0.43	3
Rosos Fountain Solution (used in 4,5,6)	0.26	8.34	0.00%	0.00	0.00	3
Rycolite Cleaner (used in 7)	0.21	7.1	6.70%	0.10	0.02	1
Rycolite Cleaner (used in 8)	0.46	7.1	6.70%	0.22	0.04	1
Rycolite Cleaner (used in 9)	0.01	7.1	6.70%	0.00	0.00	1

Total tons per year	**1.60**

Appendix A: Emissions Calculations

HAPs From Printing Press Operations

Company Name: D.E. Baugh
Address City IN Zip: 1661 West 16th Street, Indianapolis, Indiana 4620222-2060
Reviewer: Angelique Oliger
Date: 03/11/03

THROUGHPUT

Press I.D.	max line speed feet/min	convert feet to inches	max print width (in)	60 MIN HOUR	8760 HR YEAR	1/1000000	Throughput MMin^2/YEAR[1]
UV Coater 1	311	12	40	60	8760	1000000	78462
UV Coaters 2 & 3	97	12	40	60	8760	1000000	24472
Lithographic 4, 5, and 6	76	12	17	60	8760	1000000	8149
Engraver 7	19	12	3	60	8760	1000000	360
Engraver 8	25	12	5	60	8760	1000000	788
Engraver 9	11	12	2.5	60	8760	1000000	173

(1) Throughput = Maxium line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year

PTE for VOCs

Compound Name (Compound with highest VOC content)	Maxium Coverage lbs/MMin^2	Weight % methanol	Weight % toluene	Weight % xylene	Weight % ethylbenzene	Weight % methylene chloride	Flash Off %	Throughput Mmin^2/year	Tons 2000 lbs	Tons/yr (2) methanol	Tons/yr (2) toluene	Tons/yr (2) xylene	Tons/yr (2) ethylbenzene	Tons/yr (2) methylene chloride	Number of presses
Rycolite Cleaner (used in 1)	0.15	1.00%	30.00%	0.00%	0.00%	0.00%	100.00%	78462	2000	0.06	1.77	0.00	0.00	0.00	1
Rycolite Cleaner (used in 2,3)	0.15	1.00%	30.00%	0.00%	0.00%	0.00%	100.00%	24472	2000	0.02	0.55	0.00	0.00	0.00	2
COL Blanket Wash (used in 4,5,6)	0.15	22.20%	6.00%	36.00%	22.00%	30.00%	100.00%	8149	2000	0.14	0.04	0.22	0.13	0.18	3
Rosos Fountain Solution (used in 4,5,6)	0.1	0.50%	0.00%	0.00%	0.00%	0.00%	100.00%	8149	2000	0.00	0.00	0.00	0.00	0.00	3
Rycolite Cleaner (used in 7)	0.15	5.80%	30.00%	0.00%	0.00%	0.00%	100.00%	360	2000	0.00	0.01	0.00	0.00	0.00	1
Rycolite Cleaner (used in 8)	0.15	6.00%	30.00%	0.00%	0.00%	0.00%	100.00%	788	2000	0.00	0.02	0.00	0.00	0.00	1
Rycolite Cleaner (used in 9)	0.15	6.00%	30.00%	0.00%	0.00%	0.00%	100.00%	173	2000	0.00	0.00	0.00	0.00	0.00	1
							Tons per year (all presses)			0.514596	3.006363	0.66006109	0.40337067	0.55005091	
														Total HAPs	**5.13**

(2) VOC = Maximum Coverage pounds per MMin^2 * Weight % volatiles (weight % of water & organics - weight % of water = weights % organics) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year